



Munich Personal RePEc Archive

Fintech contribution to Indonesia's economic growth

Nasihin Aziz, Athoillah

Pascasarjana IAIN Syekh Nurjati Cirebon

30 December 2019

Online at <https://mpra.ub.uni-muenchen.de/97884/>

MPRA Paper No. 97884, posted 07 Jan 2020 11:09 UTC

Fintech contribution to Indonesia's economic growth

Athoillah

Postgraduate Program IAIN Syekh Nurjati Cirebon

Abstract

Fintech investment increased substantially in 2018 with total global investment dollars in all M&A, PE, and VC more than doubling from \$ 50.8 billion in 2017 to \$ 111.8 billion in 2018. In Indonesia, the financial technology industry (fintech) is growing The rapid growth of both fintech payments and loans, this is reflected in the distribution of fintech loans which penetrated Rp33.2 trillion in May 2019, while fintech payment transactions reached Rp47.1 trillion in 2018. Indonesian fintech players are still dominant in the payment business (43%), loans (17%), and the remainder in the form of aggregators, crowdfunding and others. The development of fintech has increased Indonesia's GDP by Rp25.97 trillion.

Keywords: Digital economy, financial technology (fintech), economic growth.

JEL Classification: O00, O11

1. Introduction

The term digital economy emerged as a concept of economic activity based on digital technology. The digital economy was first created by Tapscott (1994), which is about how technology and business strategies are transformed not only in business processes but also in the transformation of the way products and services are produced and marketed, the structure and objectives of the company. the company, and the dynamics of business competition. So far the digital economy can be felt most by the phenomena of electronic commerce (e-commerce) and markets for services, such as transportation and hotels (Ilman, Nurjihadi, & Noviskandariani, 2019).

The increasing use of the internet by Indonesians is a sign of the digital age. According to 2018 data from Global Digital Report Data, the number of internet users in Indonesia has reached 132 million people, or more than 50% of Indonesians can access the internet. Therefore, at present, the activities of modern society tend to use technology more intensively to meet their needs (Fahlefi, 2018).

Fintech's investment increased substantially in 2018 with total global investment dollars in all M&A, PE, and VC more than doubling from \$ 50.8 billion in 2017 to \$ 111.8 billion in 2018. Major transactions throughout 2018 - including the acquisition of Worldpay by Vantiv for \$ 12.86 billion, Ant Financial raised about \$ 14 billion, which the Times of India called the world's largest single fundraiser by private companies, and \$ 17 billion PE investment in Refinitiv helped spur interest and activity in the market fintech (Pollari & Ruddenklau, 2019).

The financial technology industry (fintech) is developing rapidly in Indonesia both from fintech payments and loans. This is reflected in fintech lending that penetrated 33.2 trillion rupiah in May 2019, while fintech payment transactions amounted to 47.1 trillion rupiah in 2018 (Sari & Kartika, 2019). The financial technology industry (fintech) is one of the methods of financial services that are gaining in popularity in the current digital era. The sector is then most expected by the government and society to encourage an increase in the number of people who have access to financial services.

In the first decade of the millennium, Indonesia's real GDP growth rate increased significantly throughout the year, from 3.6 percent in 2001 to 7.4 percent in 2008. But this growth slowed to 4.8 percent in 2015. From 2016 to 2020, the economy is estimated will grow by 5 percent. This decline will continue because the contribution of two components of GDP growth, namely labor input and productivity continues to decline.

If Indonesia wants to return to a 7 percent growth rate per year, there is no choice but to increase labor participation and productivity in Indonesia. Through a combination of these elements, digital technology can achieve a total impact of around \$ 150 billion by 2025 (Das, Gryseels, Sudhir, & Tan, 2016).

The purpose of writing this paper is to answer the question of whether the development of financial technology (fintech) has an impact on Indonesia's economic growth?

2. Methodology

The method used in writing this article is in the form of descriptive analysis and literature study. Descriptive analysis aims to explain the impact of financial technology (Fintech) on economic growth in Indonesia.

3. Result and Discussion

3.1. Financial Technology (Fintech)

The National Digital Research Center (NDRC), in Dublin, Ireland, defines fintech as "innovation in financial services" or "innovation in fintech financial services" which is innovation in the financial sector that gets a touch of modern technology. Financial transactions through fintech include payments, investments, money lending, transfers, financial plans and financial product comparisons (Rizal, Maulina, & Kostini, 2018).

The Fintech concept adapts technological developments combined with the financial sector in banking institutions so that it is expected to facilitate a more practical, secure and modern financial transaction process, including digital-based financial services that are currently developing in Indonesia, namely payment system channels, digital banking, insurance digital online, Peer to Peer (P2P) Loans, and crowdfunding (Christmastianto, 2017).

While Bank Indonesia described financial technology as a "phenomenon of a combination of technology and financial features that changed business models and weakened barriers to entry". This definition identifies two main implications of the

development of financial technology, namely: 1) Changing business models, financial services are carried out with concepts and models that are different from before. 2) Reducing barriers to entry to business with the emergence of unregulated financial service players and providers who can provide financial services as performed by regulated actors.

The terminology of financial technology from Bank Indonesia does not refer to or limit the definition of certain institutional/institutional or financial / payment instruments. Thus the scope is very broad and non-exclusive (financial technology business models can fall into more than one category), and can be done by anyone, whether formal financial institutions or new companies that develop innovative financial technology business models (Ilman et al., 2019).

3.2. Development of Fintech Global

Globally, fintech has shown rapid development in various sectors, ranging from initial payments, loans, financial planning, retail investment, crowdfunding, remittances, financial research, and others. Indonesian fintech players are still dominant in the payment business (43%), loans (17%), and the rest are in the form of aggregators, crowdfunding, and others (Hadad, 2017).

3.3. The Development of Fintech in Indonesia

In May 2019, there were 249 fintech companies in Indonesia, ranging from deposits and loans to payments and capital increases. The two fastest-growing areas of fintech in Indonesia are peer-to-peer (P2P) loans and electronic payments. Based on Bank Indonesia statistics, the value of e-money transactions grew six-fold between 2012 and 2017 to Rp12.3 trillion (\$ 840 million). Meanwhile, based on OJK data in December 2018, lending through P2P reached Rp22.67 trillion (\$ 1.62 million), an increase of 645% YoY. These funds come from 101 local P2P platforms registered with OJK (Batunanggar, 2019).

In addition, there are 55 other fintech companies which do not include electronic payments and P2P loans, which have been registered with the OJK, including aggregators, credit appraisals, insurance technology, financial planning, etc. They are expected to make financial services accessible to people who do not have a bank account and are underserved.

3.4. Financial Inclusion and Financial Literacy

Fintech enhances financial inclusion by giving individuals and businesses access to financial products and services such as transactions, payments, savings, credit, and insurance. Fintech can also provide the financing needed by MSMEs. Financial literacy implies the ability to create information perceptions and make appropriate choices regarding the use of money. Financial literacy can make changes not only in the lives of individuals but in the integrity and quality of the market. In Indonesia, the need for financial literacy is more significant given the low level of education and a very large population, which is largely outside of formal financial arrangements, especially in rural

areas. Fintech is one of the strategies to achieve Indonesia's goal of 75% financial inclusion by 2019. However, the OJK survey found that only about 30% of the population is financially literate, making full inclusion with potential hazards. Recent experience in online consumer financing shows that poor people take loans that they cannot repay. Therefore, financial inclusion must be integrated with customer education and financial literacy. Fintech's obligation to promote financial literacy has been discussed in Article 4 of OJK Regulation No. 13 of 2018 concerning Digital Financial Innovations in the Financial Services Sector (Batunanggar, 2019).

3.5. Financial Technology (Fintech) as a Driver of Indonesia's Economic Potential

Fintech with financial services such as crowdfunding, mobile payments, and money transfer services is causing a revolution in the startup business. With crowdfunding, you can get funds from all over the world easily, even from people you've never met, Fintech also allows money transfers globally or internationally. Fintech also has an important role in changing the behavior and expectations of consumers including 1) being able to access data and information anytime and anywhere. 2) Aligning large and small businesses so that they tend to have high expectations even for newly built small businesses.

Globally, the Fintech industry continues to grow rapidly. Evidenced by the emergence of startup companies in this field and the amount of global investment in it. Especially in Indonesia, this business is growing very rapidly to attract the attention of all business people in Indonesia (Muzdalifa, Rahma, & Novalia, 2018).

As the fourth most populous country in the world, and with more than 60 percent of the population representing the working-age, Indonesia has unique economic potential. This working-age population has the potential to drive Indonesia's Gross Domestic Product (GDP) through consumer spending and local production capabilities if fully utilized. However, according to the International Monetary Fund, Indonesia is projected to only produce 32 percent of the United States' per capita GDP even at the peak of the working-age population in 2031 (Rungkat, Subianto, Wake, & Smith, 2019).

One key element that can drive economic growth for credit and production support. However, Indonesia has very low loan disbursements per GDP compared to other countries in 2017, indicating that funding capacity has not been fully utilized. Without better access to finance, it will be more difficult for individuals and SMEs in Indonesia to become engines of economic growth.

The presence of company contributions contributes to the development of MSMEs. Not only limited to helping venture capital financing, but Fintech's role has also been extended to various aspects such as digital payments and financial services.

Economic growth can be achieved when productive resources can be utilized optimally and allocated equally. The aim of economic development is to achieve the main goal of creating prosperity and reducing inequality. In the process of developing Indonesia's economy, the MSME sector has a very strategic and important role.

Small and medium enterprises (SMEs) have a strategic role in building the economy of a country or region, not least in Indonesia. Micro, small and medium enterprises become one of the priorities in the development agenda in Indonesia, this is evident from the survival of the SME sector during the economic crisis in 1998, when compared to other sectors that are bigger it is unable to withstand the economic crisis (Muzdalifa et al., 2018). With a very important role owned by MSMEs, Fintech will be able to help more in dealing with funding issues so that MSMEs can develop more advanced and can meet Indonesia as one of the largest Digital Economy countries in 2024.

3.6. Economic growth

A successful development program in developing countries is often judged based on the high and low speed and or growth rate of output and national income generated. However, the main concern of development through accelerating the level of growth of national income or economic growth, on the other hand, there is the spread of income growth is still very limited in the reach of power between regions in developing countries is not balanced, so it tends to widen the gap or inequality between rich regions and poor areas.

The initial stage of economic growth, the distribution of income tends to deteriorate, and the next stage, the distribution of income will improve, but at some time there will be an increase in disparity again and eventually decrease again. In the short term, there is a positive correlation between growth in income per capita with income disparity. But in the long run, the relationship between the two becomes a negative correlation.

Economic growth is the development of activities in the economy that causes goods and services produced in the community to increase so that it will improve the welfare of the community. According to Budiono, economic growth is a process of increasing output per capita in the long run (Suparyati & Fadilah, 2015).

In the 20th century, theories of economic growth were based on classical streams, Adam Smith and David Ricardo were figures of classical economists who discussed many economic theories, including economic growth. In his book entitled *An Inquiry to the Nature and Causes of Wealth of Nations* (1776), Adam Smith explained how to analyze economic growth through two factors, namely the total output factor and the population growth factor. Meanwhile, according to Joseph A. Schumpeter in his book entitled *Theory of Economic Development*, discusses the important role of entrepreneurs in development. Schumpeter concluded that the process of economic growth is basically a process of innovation carried out by innovators and entrepreneurs in the global market when information and technology development.

Other economists W.W. Rostow discuss economic growth and development theory. In his book titled *The Stages of Economic, A Non-Communist Manifesto* contains a historical approach to explain the process of economic development that occurs in society. According to Rostow in a society, the process of economic growth takes place through several stages, including:

- a) Traditional society

- b) Prerequisites for take-off
- c) The take-off stage
- d) The stage to maturity (maturity)
- e) High mass consumption stage

In the above five stages, according to Rostow, economic development or the process of transforming a traditional society into a modern society is a multi-dimensional process, where economic development is not only a change in its economic structure but a change in political orientation, social orientation, community views, changes in community investment activities, changes in life attitudes and community customs (Marlinah, 2019).

3.7. The Impact of Financial Technology (Fintech) on Economic Growth

Conceptually, financial technology which is an acronym of technology and finance has strong theoretical roots in driving economic growth. The financial system plays a very important role in channeling funds from excess parties to those in need so that economic activity can run effectively and efficiently (Matthews, Giuliodori, & Mishkin, 2013).

Financial markets can be done through direct finance (direct finance) or indirect financing (indirect finance). The fundamental difference between the two types is the existence of financial intermediary institutions in indirect financing that shape the process of channeling funds. The role of financial intermediary institutions is very important in this fund flow process because it can reduce transaction costs, the existence of a risk-sharing system, prevent adverse selection and moral hazard by providing symmetrical information. Thus, owners and borrowers of small amounts of funds can participate in the financial markets, so as a whole can improve efficiency in the economy (Matthews, Giuliodori, & Mishkin, 2013). The intended efficiency allows limited resources to be allocated for productive activities and is able to significantly boost economic growth.

Meanwhile, technology and innovation in endogenous economic growth theory are accepted as the only factors that can drive economic growth in the long run. Specifically, this theory focuses on positive externalities and the spillover effect of a knowledge-based economy (knowledge-based economy) that creates innovation that can drive economic development.

The integration of technological elements into the financial system would theoretically have a greater impact on the economy. The formal financial system alone has been able to reduce the asymmetrical information between financial actors, the existence of technology (especially information technology) has pushed financial services to a higher level and increased financial service efficiency. Current developments in information technology allow access to unlimited data and encourage the creation of added value from data that has not been previously optimized. The abundance of accurate and real-time data will be able to reduce the potential for asymmetric information more significantly (Ilman et al., 2019).

The results of a study by the Institute for Development of Economics and Finance (Indef) on the role of fintech lending in the Indonesian economy, that the development of

fintech has added to GDP by Rp25.97 trillion. While sectorally fintech is able to stimulate growth in the financial services sector, insurance, corporate services, pension funds, and information communication. Another interesting finding is that the development of fintech has absorbed the workforce of 215,433 people and increased labor income in the form of wages and salaries of Rp4.56 trillion. Fintech lending has also been proven to improve the economy through lending, especially to the MSME sector (Adhinegara, Huda, & Farras, 2018).

4. Conclusion

Advances in digital technology have influenced the financial services industry and created a separate industry namely financial technology, which can be interpreted as the use of technology (information) in the financial sector and give more focus to the user experience. In Indonesia, the development of financial technology (fintech) made a positive contribution to GDP and stimulated growth in the financial sector and employment.

References

- Adhinegara, B. Y., Huda, N., & Farras, I. A. (2018). Peran Fintech Lending Dalam Ekonomi Indonesia. *INDEF Monthly Policy Brief*, 1(1), 3.
- Batunanggar, S. (2019). Fintech Development and Regulatory Frameworks in Indonesia. *Asian Development Bank Institute*, 1014, 16.
- Chrismastianto, I. A. W. (2017). Analisis Swot Implementasi Teknologi Finansial Terhadap Kualitas Layanan Perbankan Di Indonesia. *Jurnal Ekonomi dan Bisnis*, 20(1), 12.
- Das, K., Gryseels, D., Sudhir, P., & Tan, K. T. (2016). *Unlocking Indonesia's digital opportunity* (p. 28). McKinsey Indonesia.
- Fahlefi, R. (2018). Inklusi Keuangan Syariah Melalui Inovasi Fintech Di Sektor Filantropi. *Batusangkar International Conference III*, 8.
- Hadad, M. D. (2017, June). *Financial Technology (FinTech) di Indonesia*. Kuliah Umum tentang FinTech presented at the Jakarta. Jakarta.
- Ilman, A. H., Nurjihadi, M., & Noviskandariani, G. (2019). Peran Teknologi Finansial Bagi Perekonomian Negara Berkembang. *Jurnal Ekonomi dan Bisnis Indonesia*, 04(01), 9.
- Marlinah, L. (2019). Mendorong Pertumbuhan Ekonomi Indonesia Melalui Penguatan Sektor Ekonomi Digitalpreneur Dan Creativepreneur. *Ikraith-Ekonomika*, 2(1), 7.
- Matthews, K., Giuliadori, M., & Mishkin, F. S. (2013). *The economics of money, banking and financial markets*. Pearson Higher Ed.

- Muzdalifa, I., Rahma, I. A., & Novalia, B. G. (2018). Peran Fintech Dalam Meningkatkan Keuangan Inklusif Pada UMKM Di Indonesia (Pendekatan Keuangan Syariah). *Jurnal Masharif al-Syariah: Jurnal Ekonomi dan Perbankan Syariah*, 3(1).
- Pollari, I., & Ruddenklau, A. (2019). *The Pulse of Fintech 2018 Biannual global analysis of investment in fintech* (p. 75). KPMG.
- Rizal, M., Maulina, E., & Kostini, N. (2018). Fintech One Of The Financing Solutions For SMEs. *AdBispreneur : Jurnal Pemikiran dan Penelitian Administrasi Bisnis dan Kewirausahaan*, 3(2), 12.
- Rungkat, S., Subianto, Wake, D., & Smith, J. (2019). *Indonesia's Fintech Lending: Driving Economic Growth through Financial Inclusion—Executive Summary* (p. 34). PwC Indonesia.
- Sari, F., & Kartika, H. (2019, September 4). *Terus bertumbuh, berikut tantangan perkembangan fintech di Indonesia*. Retrieved from <https://keuangan.kontan.co.id/news/terus-bertumbuh-berikut-tantangan-perkembangan-fintech-di-indonesia>
- Suparyati, A., & Fadilah, N. (2015). Dampak Economic Freedom Terhadap Pertumbuhan Ekonomi Negara Asia. *Jurnal Ekonomi dan Studi Pembangunan*, 16(2), 19.